

MYOCARDIAL ISCHEMIA AND INFARCTION

A COMPARISON OF CLINICAL OUTCOMES IN THE BYPASS ANGIOPLASTY REVASCULARIZATION INVESTIGATION IN TYPE-2 DIABETES MELLITUS (BARI 2D) BY TYPE OF STENT IMPLANTATION

ACC Poster Contributions
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Background: Bypass Angioplasty Revascularization Investigation in type-2 Diabetes (BARI2D) reported similar outcomes for medical therapy (Med) and revascularization (Revasc) strategy in diabetic patients (pts) with coronary disease (CAD). Since Drug eluting stents (DES) were available midway through BARI2D, we compared outcomes stratified by DES vs. Bare Metal Stent (BMS) use.

Methods: Overall, 807 pts were randomized to Med, 798 to Revasc (260 DES, 424 BMS, 114 excluded for no stent / Revasc after time window). Kaplan-Meier survival analyses was used to compare four-year clinical events and Chi-square test for self-reported angina.

Results: Baseline characteristics of Med and Revasc pts were well matched. Med, BMS and DES pts had similar four-year rates of death, MI, stroke, whereas self-reported angina, equal at baseline, was less in DES and BMS pts over first two years (Table). In subgroup analysis, Death/MI/Stroke rates were similar in DES vs. BMS vs. Med pts with one vessel (19% vs. 17% vs. 18%, $P=0.99$), multivessel disease (23% vs. 26% vs. 24%, $P=0.64$), myocardial jeopardy $<50\%$ (20% vs. 21% vs. 19%, $P=0.92$) and $\geq 50\%$ (23% vs. 26% vs. 27%, $P=0.84$). At four years, 43% of Med Rx, 32% of BMS and 24% of DES pts required revasc ($P<0.0001$ for all; $P=0.95$ for BMS vs. DES).

Conclusions: In BARI2D, a strategy of routine Revasc in diabetic pts with CAD did not improve four year outcomes compared to Med, regardless of stent type. However, DES pts reported less angina at two years, a benefit that was not maintained at four years.

Table: Four-Year Rate of Clinical Events within PCI Stratum of BARI2D

Outcome	Med Rx (N=807)	DES (N=260)	BMS (N=424)	P Value
Death, %	7	8.2	8.8	0.51
MI, %	10.1	8.6	12	0.38
Stroke, %	2.7	2.3	2.6	0.90
Death/MI/Stroke	16.1	17.8	20.5	0.13
Baseline Angina, %	59	60	61	0.92
1-year Angina, %	58	45	49	<0.001
2-year Angina, %	40	28	26	0.005
3-year Angina, %	35	27	33	0.13
4-year Angina, %	29	24	26	0.35